

SKEGBY
RURAL DISTRICT COUNCIL.

ANNUAL REPORT

FOR

1898.

BY

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MEDICAL OFFICER OF HEALTH.

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1899.

To the Chairman and Members
OF
The Skegby Rural District Council.

GENTLEMEN,

The health of your district during the period now under consideration has not been marked by any feature of special interest or importance.

The general standard of health compares favourably with that of previous years, as the following Report will show.

VITAL STATISTICS. The estimated population of the whole district has now reached 5246. The area in acres remains the same as in previous years, viz. : 11,958.

The district has again been divided into two sub-divisions, viz. : (1) Skegby, including the parishes of Skegby, Teversal, and Fulwood. (2) Blidworth, including Blidworth, Heywood Oaks, Lyndhurst and Soukholme.

Skegby Sub-district.	Blidworth Sub-district.
Population ... 4127	Population ... 1157

Until a more frequent census is taken it will be impossible to arrive at more than a very approximate estimate of such population. The calculations are based entirely on the census population of 1881 and 1891, without taking into consideration local influences, such, for instance, as a new line of railway, or the development of fresh seams of coal, both of which have actually taken place in the Skegby sub-district.

The higher rate of wages obtainable in towns and large centres of industry has an influence in inducing the young to leave their "rural homes" for the more active but less healthy occupations of urban districts.

A perusal of the following figures will show at a glance the variations which have taken place in the vital statistics of the district since 1892.

	1892.	1893.	1894.	1895.	1896.	1897.	1898
Birth-rate per 1000	42.59	38.44	36. 7	44.55	38.93	38.23	37.17
Death-rate ,,	21.92	15.62	12 30	14 51	16.04	19.98	15.63
Zymotic Death-rate	5.21	1.42	.81	2.18	3.11	4.65	3.24
Infant Death-rate..	161.76	101.60	109. 9	133.92	130.55	182.74	174.35

The sub-districts considered separately :

	SKEGBY.				BLIDWORTH.			
	1895.	1896.	1897.	1898.	1895.	1896.	1897.	1898.
Population.....	3863	3948	4037	4127	1166	1163	1160	1157
Birth-rate	47.38	42.04	40.12	37. 8	35.16	28.37	30.17	33.70
Death-rate	14.75	16.71	20.80	14.53	13.72	13.75	16.37	19.00
Zymotic Death-rate	2.58	4.05	5.94	3.39	.85	1.71	Nil.	2.60
Infant Death-rate	142.07	132.53	203.70	173.07	97.56	121.21	95.71	179.48

BIRTHS. The number of registered Births during the year corresponds very closely with that for the year previous. A total of 195 was recorded during 1898, showing a decrease of two on the year under consideration.

	1895.	1896.	1897.	1898.
Skegby	183	166	162	156
Blidworth ...	41	33	35	39
	224	199	197	195

It is interesting to note the gradual decline which has taken place in the number of births since the year 1895. The numbers occurring in each quarter of the year were as follows :

SKEGBY.

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.
Males	20	27	15	14	76
Females...	21	24	24	11	80
	41	51	39	25	156

BLIDWORTH.

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.
Males	4	11	4	2	21
Females...	1	10	4	3	18
	5	21	8	5	39

DEATHS. The number of Deaths registered during 1898 was 82, showing a decrease of 21 on the previous year. Even with this substantial diminution it should be noted that no less than 41.4 per cent occurred in children during the first year of life. This high rate of mortality is deserving of your most careful consideration. The matter will be further dealt with under the heading "Infant Mortality."

Four deaths were due to Typhoid Fever, 3 to Whooping Cough, 10 to Diarrhœa, 4 to Phthisis, 12 to Diseases of the Respiratory System, 2 to Heart Disease, 7 to Cancer, and 1 to Injury.

The number of deaths attributed to Cancer appears somewhat startling, but this may possibly be explained by the fact that within recent times diseases which were formerly unrecognised, are now, owing to better methods of diagnosis, found to be Cancer.

The death-rate, which was equal to 15.63 per 1000 living, shows a decrease of 4.35 on the year previous.

The following are the rates for England and Wales during the year 1898, and may serve for comparison.

			Per 1,000 living.
General Death-rate	...	...	17.6
Urban	„	(1897)	18.2
Rural	„	(„)	15.8
Infant	„	(per 1000 Births)	161

The number of Deaths occurring in each quarter of the year was as follows :

SKEGBY.

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.
Males	11	3	6	5	25
Females...	9	5	10	11	35
	20	8	16	16	60

BLIDWORTH.

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.
Males	8	0	2	2	12
Females...	7	1	1	1	10
	15	1	3	3	22

INFANT MORTALITY, measured by the proportion of deaths under one year of age to registered births was equal to 174.35 per 1000.

After taking into consideration all the mitigating circumstances, the death-rate cannot be considered otherwise than unsatisfactory. There are many agencies at work calculated to destroy infant life, and these vary in different localities. Perhaps none are more potent than imperfect hygienic surroundings, whilst bad and insufficient food claim many victims.

The pernicious custom of dosing young children with opiates, —not so much with the object of producing sleep, as a means of allaying the disturbance which is set up in the alimentary tract, through the injudicious custom of feeding them on all kinds of indigestible substances which first come to hand, such, for instance, as potatoes, raw fruit, and even meat—has a very injurious effect on the development of the nervous system.

The mortality amongst illegitimate children is very high, and there can be no doubt that children born in wedlock have a better chance of reaching maturity. Many of our criminals belong to this class, hence the question becomes one for State consideration.

ZYMOTIC DISEASES & RATES OF MORTALITY. It is customary to include under this heading seven diseases, viz.: Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (Typhus, simple, continued, and Typhoid), and Diarrhœa.

The zymotic death-rate is useful in a limited degree as a means of indicating what the general sanitary condition of the district is like. Densely crowded areas, and the aggregation of people in close apartments are causes calculated to spread diseases, particularly those of the zymotic type.

The Plague which almost decimated Athens was largely due to the policy of Pericles, who sought to bring the country population within the walls of the ancient city. Those parts which were in the most deplorably bad sanitary condition were the very localities where the plague was most prevalent and destructive.

In considering the zymotic death-rate of a district, and comparing it from year to year, too much importance must not be attached to annual variations; the prevalence of any specific disease in the district will at once raise the figures.

During the year under consideration the total number of deaths amounted to 17. The number for 1897 was 41. The deaths from Enteric Fever numbered 4, and were confined to the Skegby district. The deaths from Diarrhoea exceeded the number recorded for the previous year by two. Not any deaths from Scarlet Fever, Measles, or Diphtheria were noted. Whooping Cough was responsible for three deaths.

Table showing cases notified during each month of 1898,

Month.	Scarlet Fever.	Diphthe- ria.	Typhoid Fever.	Erysip- elas.	Puerperal Fever.
January ...	5	...	1		
February ...	...	...	...	1	
March ...	2	...	2	1	
April ...	2				
May ...	...				
June ...	1				
July ...	2	...	...	1	
August ...	1	...	1		
September ...	...	...	2		
October ...					
November ...	1	...	1		
December ...	..	...	1		
TOTAL ...	14	Nil.	8	3	Nil.

Four deaths resulted from the above number of reported cases, all of which were Typhoid Fever.

The zymotic death-rate, which was equal to 3.24 per 1,000, was lower by 1.41 per 1000 than in the year previous.

The zymotic death-rate for England and Wales during 1898 was 2.22 per 1000.

For London ... 2.78 per 1000. For Nottingham... 2.37 per 1000.

Zymotic Death Rates for two Sub-Districts.

	1891	1892	1893	1894	1895	1896	1897	1898
Skegby	2.23	5.26	1.63	.79	2.58	4.05	5.94	3.39
Blidworth...	—	5.10	.85	.85	.85	1.71	Nil.	2.60

SCARLET FEVER. When considering this disease it should be borne in mind that during the previous year it was epidemic in the neighbourhood of Skegby, that fact being sufficient to account for the few cases which were notified during 1898. It is seldom that the district can be said to be free from this disease for any length of time, as the following particulars will show.

	1892	1893	1894	1895	1896	1897	1898
Skegby	3	28	75	0	27	35	14
Blidworth...	1	2	8	0	1	1	0
	4	30	83	0	28	36	14

The year 1895 was remarkable in not having to record a single case. Probably the epidemic of 1894 cleared the ground of all susceptible material.

The few sporadic cases which have occurred in the Blidworth district since 1892, show pretty conclusively that the incidence of the disease is largely influenced by the density of the population, not perhaps so much by the number of inmates in each house, as by the crowding together of buildings in large blocks.

In the locality of Blidworth houses are sparsely distributed, and in no single instance are the houses aggregated together as seen at Stanton Hill and Meden Bank.

The numbers notified during each quarter of the year were as follows :

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
7	3	3	1

No deaths occurred from this disease. Out of the 14 cases notified none occurred in children under 3 years of age; 10 occurred in children over 3 years and under 13 years of age; 4 occurred in children over 13 years of age. It appears that the school period of life furnished the highest number.

The universal adoption of the Isolation Hospitals Act, 1893, would do more to prevent the spread of Scarlet Fever than anything else. It is an adoptive Act, vested in the hands of the County Council, and any County Council shall, on an application being made by any local authority having jurisdiction in the county, consider such application, and may if they think fit, after due consideration, provide for the establishment of an Isolation Hospital or Hospitals in the said district.

The County Council of Derbyshire have already formed a Joint Hospital Board; a Sites Committee has been appointed; and Plans have been received for the construction of three Hospitals.

The prevalence of Enteric Fever in a district is usually considered to be indicative of bad sanitary surroundings. It is a preventible disease, and ought to be entirely stamped out of the country.

Eight cases were brought to the notice of the Medical Officer of Health during the year, seven of which were reported from Skegby, and one from Blidworth.

3	occurred at Meden Bank
2	„ in Stoneyford Lane
1	„ at Skegby Forest
1	„ at Boundary Terrace
1	„ at Fishpool (Blidworth)
8	

No less than 50 per cent. of the cases terminated fatally.

It was found impossible to trace the disease to any distinct cause. Neither the milk nor the water were at fault.

Personal cleanliness and care in nursing can do much to prevent its spread when the disease is once established.

I believe the typhoid bacillus is much more frequently present in soil and filth than we have been accustomed to think in the past. Great care should be taken to see that the hands are clean before commencing to handle food, and that all garden produce is properly cleansed before being consumed.

The cardinal point, of course, is to see that the excreta from cases is either destroyed or efficiently disinfected before being buried.

DIPHTHERIA. No case has been reported during the year under consideration.

SMALL POX. The question of Vaccination was dealt with at considerable length in my report of last year, and from what I said then I now feel, after twelve months have been allowed to pass, that my remarks, strong as they were, might even have been made stronger.

The Vaccination Act, which came into force on the first day of the Year now under consideration, practically does away with the compulsory clauses of the previous Acts.

The vaccination question has recently unfortunately entered largely into politics, both local and general. On numerous occasions the electioneering cry heard has been "Vaccination or No Vaccination." The temperature of such times runs too high for the deliberation of matters so important and far-reaching. Public agitators are not slow to take advantage of periods of great excitement, when the reasoning powers of the masses are warped by the fever heat of matters public or municipal.

Why has confidence in Vaccination to some extent been shaken?

The answer to this question may help to clear up a few difficulties. In the first place, let it be distinctly understood that the protection acquired by Vaccination only holds good for a certain number of years. There can be no doubt that the early advocates relied too much on the protective power from a single vaccination : even Jenner himself thought that the result was life-long.

The opponents of Vaccination in the past have, undoubtedly, had some grounds for complaint. For instance, there ought never to have been any difference between the rich and the poor.

The operation itself, though very trifling, needs care, and certain precautions ought in every case to be strictly adhered to in carrying it out. Then, again, the best selection of lymph, though insisted upon by the Local Government Board, has not always received the attention it might have done. These are some of the grounds which have been held up and preached at random by paid agitators, in too many cases greatly exaggerated, in some with very little foundation in fact. The Act of 1897, which was framed on certain recommendations of a Royal Commission, has made ample provision for these and other imperfections.

It should be remembered that the outcome of that Commission was, after carefully weighing and deliberating at great length on all available evidence, almost unanimously in favour of Infant Vaccination and re-Vaccination at the school period of life (10 years), as being the best known methods of preventing epidemic Small Pox.

Germany, a nation well to the front in most branches of science and learning, is capable of teaching us a valuable object lesson even in this department of public health.

The experience derived from the epidemic of Small Pox in 1870-74, and the manner in which the citizens of Bavaria and the inhabitants of Frankfort escaped the disease, when flooded with French prisoners suffering from Small Pox during the Franco-

German war, opened the eyes of the government to the importance of making re-vaccination a part of her national system of protection. The results are such that since re-vaccination became compulsory, Small Pox has never become seriously epidemic.

Lessons of equal importance might be learnt much nearer home. Sheffield, Gloucester, and Leicester are capable of testifying to the advantages a vaccinated community has over one unvaccinated, or where vaccination is imperfectly performed.

The evidence furnished by Dr. Barry in his report on the Sheffield epidemic 1887-8, is worth considering. It is as follows :

SMALL POX ATTACKS AND DEATHS (per 1,000 of each class stated).

	ATTACK RATE.		DEATH RATE.	
	Vaccinated	Un-Vaccinated	Vaccinated	Un-Vaccinated
0—10 years of age	5	101	0.1	44
Ditto living in invaded houses	78	869	1	381
Over 10 years of age	19	94	1	51
Ditto living in invaded houses	281	686	14	371
All ages	15.5	97	0.7	48
Ditto living in invaded houses	230	750	11	372

“A perusal of the above figures will show that the vaccinated, as compared with the unvaccinated part of the population, possess at ages below 10 years, a twenty-fold immunity from attack, and a 480-fold security against death ; at ages over 10, a five-fold immunity from attack, and a 51-fold security against death from Small Pox ; at all ages a six-fold immunity from attack, and a 64-fold security against death from Small Pox.”

Evidence confirmatory of the advantages of Vaccination and re-Vaccination is furnished by Dr. Sidney Coupland in his report on the Leicester outbreak of Small Pox, 1892-3.

The study of diseases, and particularly the zymotic diseases, in the light of modern knowledge and recent methods, confirms the part played by Vaccination in preventing the spread of Small Pox.

The science of bacteriology is doing much to make clear what has for ages past been a fog ; diseases which a few years ago we knew little about, and troubled less, are now being investigated on lines at once scientific and eminently successful. It is even only within the last few months that the cause of Malaria, a disease which was thought for ages past to owe its origin to certain conditions of soil, has been found to be produced by the bites of insects. The treatment of Anthrax in cattle by vaccination, is a method which has only very recently been tried.

Let it be distinctly remembered that every unvaccinated person is a danger to the State.

MEASLES. As there were no deaths recorded from this disease, it is only reasonable to suppose that, if present, it was extremely mild in character, and limited to a few sporadic cases. During the previous year it was somewhat prevalent, there being six deaths registered in the Skegby district.

WHOOPIING COUGH. Like Measles, this disease owes its origin to a specific germ, largely confined to the mucous membrane of the nose, mouth, or throat, hence readily conveyed by the breath. It is highly contagious from the first, and when once imported into a school, spreads with great rapidity.

The rate of mortality in children of the well-to-do is very low, but, unfortunately, where the surroundings are bad and poverty prevails, the death-rate makes itself somewhat conspicuous. Three deaths were recorded during the year.

DIARRHŒA. This is a disease which is usually fatal only at the two extremes of life—the very young and very old. The number of deaths attributable to this malady was 10, and they were confined to the Skegby district only. They all occurred in children under five years of age.

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
0	4	4	2

Earth Temperature middle of each quarter, and taken 4 feet below surface of ground :

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
42.5°	47.6°	58.3°	51.8°

The greater part of the cases which occurred were probably due to bad feeding. Food which has undergone fermentation, or has been contaminated by exposure to fith emanations, is the cause most calculated to bring about the disease. Breast-fed children as a rule suffer less than those artificially fed.

SCAVENGING. No regular system of Scavenging has yet been adopted, but in certain parts of the district the emptying of privy middens has been regularly done by the Stanton Iron Works Co.

WATER SUPPLY. Frequent analyses of the various Water Supplies have been made during the year, and the quality of the water was in every case quite satisfactory. In no single instance did the free ammonia exceed .002, or the albumenoid ammonia .003 per 100,000 parts.

EPIDEMIC INFLUENZA has again made itself felt throughout the country, and although less fatal in its results than when first introduced, is still the cause of considerable suffering and distress.

MILK SUPPLY OF THE DISTRICT. No systematic inspection of the dairies and milk shops of your district has yet been undertaken, but the time is not far distant when some such measure will be required.

Milk, as we know, forms a very favourable medium for the conveyance of disease, particularly Scarlet Fever, Diphtheria, and Tuberculosis. It is particularly to the spread of the latter disease through the agency of milk that attention will have to be given. Stall-fed cattle are peculiarly susceptible to Tuberculosis, and it is somewhat alarming when we consider that the indurated udder of a milch cow is capable of pouring poisonous germs by the million into its milk, and thus by this means disseminating the seeds of disease broadcast amongst the consumers.

To slaughter every diseased beast without first compensating the owner would be distinctly unjust, and as this appears to be one of the methods thought of for the eradication of Tuberculosis, the question becomes one for State consideration.

INSPECTOR'S REPORT FOR 1898.

Notices to Drain Houses	...	...	...	16
„ Provide Privies	...	...	...	4
„ Remove Nuisances	...	...	...	9
„ Provide Water Supply	...	...	...	1
Total	...	...	...	30

Certificates of Water Supply given to 26 New Houses.

TABLE OF DEATHS during the Year 1898, in the Skegby Rural Sanitary District of the Mansfield Union,
classified according to DISEASES, AGES, and LOCALITIES.

NAMES of LOCALITIES adopted for the purpose of these statistics.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																	
	At all ages.	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.	Scarlatina.	Membranous Group.	FEVERS.			Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Cancer.	Injuries.	All other Diseases	Total.	
										Enteric or Typhoid.	Puerperal.														
SKEGBY	60	27	10	—	2	16	5	Under 5	—	—	—	—	—	—	—	—	10	—	2	3	—	—	1	21	37
				—	—	—	5 upwds.	—	—	—	4	—	—	—	—	—	—	1	2	4	2	6	—	4	23
BLIDWORTH	22	7	3	—	—	4	8	Under 5	—	—	—	—	—	—	3	—	—	—	—	2	—	—	—	5	10
				—	—	—	5 upwds.	—	—	—	—	—	—	—	—	—	—	—	—	3	—	1	—	8	12
Totals	82	34	13	—	2	20	13	Under 5	—	—	—	—	—	—	3	10	—	—	2	5	—	—	1	26	37
				—	—	—	5 upwds.	—	—	—	4	—	—	—	—	—	—	1	2	7	2	7	—	12	47

TABLE OF Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health during the year 1898, in the Skegby District, classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics.	POPULATION AT ALL AGES		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.							
	Last Census.	Estimtd. to Middle of 1898			Scarlatina.	Diphtheria.	Membranous Group.	FEVERS.				Erysipelas.
								Enteric or Typhoid.	Continued.	Puerperal.		
SKEGBY .. {	3517	4127	156	Under 5	4	—	—	—	—	—	1	
				5 upwds	10	—	—	7	—	—	2	
BLIDWORTH {	1179	1153	39	Under 5	—	—	—	—	—	—	—	
				5 upwds	—	—	—	1	—	—	—	
TOTALS ..	4696	5280	195	Under 5	4	—	—	—	—	—	1	
				5 upwds	10	—	—	8	—	—	2	

I am, Gentlemen,

Yours obediently,

J. O. LITTLEWOOD, M.O.H., D.P.H.

